

2008 National Emissions Inventory

Emissions Inventory System Implementation Plan

Appendix 10 Onroad/Nonroad Activity Data References

Draft

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Appendix 10 Onroad/Nonroad Activity Data References

**Figure A10-1
Mobile 6 Vehicle Classifications**

Number	Abbrev.	Description
1	LDGV	Light-Duty Gasoline Vehicles (Passenger Cars)
2	LDGT1	Light-Duty Gasoline Trucks 1 (0 - 6,000 lbs. GVWR, 0 - 3,750 lbs. LVW)
3	LDGT2	Light-Duty Gasoline Trucks 2 (0 - 6,000 lbs. GVWR, 3751 - 5,750 lbs. LVW)
4	LDGT3	Light-Duty Gasoline Trucks 3 (6,001 - 8,500 lbs. GVWR, 0 - 5,750 lbs. ALVW)
5	LDGT4	Light-Duty Gasoline Trucks 4 (6,001 - 8,500 lbs. GVWR, 5,751 lbs. and greater ALVW)
6	HDGV2B	Class 2b Heavy-Duty Gasoline Vehicles (8,501 - 10,000 lbs. GVWR)
7	HDGV3	Class 3 Heavy-Duty Gasoline Vehicles (10,001 - 14,000 lbs. GVWR)
8	HDGV4	Class 4 Heavy-Duty Gasoline Vehicles (14,001 - 16,000 lbs. GVWR)
9	HDGV5	Class 5 Heavy-Duty Gasoline Vehicles (16,001 - 19,500 lbs. GVWR)
10	HDGV6	Class 6 Heavy-Duty Gasoline Vehicles (19,501 - 26,000 lbs. GVWR)
11	HDGV7	Class 7 Heavy-Duty Gasoline Vehicles (26,001 - 33,000 lbs. GVWR)
12	HDGV8A	Class 8a Heavy-Duty Gasoline Vehicles (33,001 - 60,000 lbs. GVWR)
13	HDGV8B	Class 8b Heavy-Duty Gasoline Vehicles (>60,000 lbs. GVWR)
14	LDDV	Light-Duty Diesel Vehicles (Passenger Cars)
15	LDDT12	Light-Duty Diesel Trucks 1 and 2 (0 - 6,000 lbs. GVWR)
16	HDDV2B	Class 2b Heavy-Duty Diesel Vehicles (8,501 - 10,000 lbs. GVWR)
17	HDDV3	Class 3 Heavy-Duty Diesel Vehicles (10,001 - 14,000 lbs. GVWR)
18	HDDV4	Class 4 Heavy-Duty Diesel Vehicles (14,001 - 16,000 lbs. GVWR)
19	HDDV5	Class 5 Heavy-Duty Diesel Vehicles (16,001 - 19,500 lbs. GVWR)
20	HDDV6	Class 6 Heavy-Duty Diesel Vehicles (19,501 - 26,000 lbs. GVWR)
21	HDDV7	Class 7 Heavy-Duty Diesel Vehicles (26,001 - 33,000 lbs. GVWR)
22	HDDV8A	Class 8a Heavy-Duty Diesel Vehicles (33,001 - 60,000 lbs. GVWR)
23	HDDV8B	Class 8b Heavy-Duty Diesel Vehicles (>60,000 lbs. GVWR)
24	MC	Motorcycles (Gasoline)
25	HDGB	Gasoline Buses (School, Transit, and Urban)
26	HDDBT	Diesel Transit and Urban Buses

(cont.)

Figure A10-1
Mobile 6 Vehicle Classifications (cont.)

Number	Abbrev.	Description
27	HDDBS	Diesel School Buses
28	LDDT34	Light-Duty Diesel Trucks 3 and 4 (6,001 - 8,500 lbs. GVWR)

Figure A10-2
Composite Vehicle Classes for Vehicle Registration Data

Number	Abbrev.	Description
1	LDV	Light-Duty Vehicles (Passenger Cars)
2	LDT1	Light-Duty Trucks 1 (0 - 6,000 lbs. GVWR, 0 - 3,750 lbs. LVW)
3	LDT2	Light-Duty Trucks 2 (0 - 6,000 lbs. GVWR, 3,751 - 5,750 lbs. LVW)
4	LDT3	Light-Duty Trucks 3 (6,001 - 8,500 lbs. GVWR, 0 - 5,750 lbs. ALVW*)
5	LDT4	Light-Duty Trucks 4 (6,001 - 8,500 lbs. GVWR, 5,751 lbs. and greater ALVW)
6	HDV2B	Class 2b Heavy-Duty Vehicles (8,501 - 10,000 lbs. GVWR)
7	HDV3	Class 3 Heavy-Duty Vehicles (10,001 - 14,000 lbs. GVWR)
8	HDV4	Class 4 Heavy-Duty Vehicles (14,001 - 16,000 lbs. GVWR)
9	HDV5	Class 5 Heavy-Duty Vehicles (16,001 - 19,500 lbs. GVWR)
10	HDV6	Class 6 Heavy-Duty Vehicles (19,501 - 26,000 lbs. GVWR)
11	HDV7	Class 7 Heavy-Duty Vehicles (26,001 - 33,000 lbs. GVWR)
12	HDV8A	Class 8a Heavy-Duty Vehicles (33,001 - 60,000 lbs. GVWR)
13	HDV8B	Class 8b Heavy-Duty Vehicles (>60,000 lbs. GVWR)
14	HDBS	School Buses
15	HDBT	Transit and Urban Buses
16	MC	Motorcycles (All)

Figure A10-3
Average Speed Ranges

Number	Abbrev.	Description
1	2.5 mph	Miles with average speed 0 to 2.5 mph
2	5 mph	Miles with average speed greater than 2.5 to 7.5 mph
3	10 mph	Miles with average speed greater than 7.5 to 12.5 mph
4	15 mph	Miles with average speed greater than 12.5 to 17.5 mph
5	20 mph	Miles with average speed greater than 17.5 to 22.5 mph
6	25 mph	Miles with average speed greater than 22.5 to 27.5 mph
7	30 mph	Miles with average speed greater than 27.5 to 32.5 mph
8	35 mph	Miles with average speed greater than 32.5 to 37.5 mph
9	40 mph	Miles with average speed greater than 37.5 to 42.5 mph
10	45 mph	Miles with average speed greater than 42.5 to 47.5 mph
11	50 mph	Miles with average speed greater than 47.5 to 52.5 mph
12	55 mph	Miles with average speed greater than 52.5 to 57.5 mph
13	60 mph	Miles with average speed greater than 57.5 to 62.5 mph
14	65 mph	Miles with average speed greater than 62.5 mph

Figure A10-4
Indicator Codes Used for NONROAD Growth-Referenced External File

Code	Description
010	Airport Service - Total
011	Airport Service - Diesel
012	Airport Service - Gasoline
013	Airport Service - LPG
014	Airport Service - CNG
020	Construction - Total
021	Construction - Diesel
022	Construction - Gasoline
023	Construction - LPG
024	Construction - CNG

(cont.)

Figure A10-4
Indicator Codes Used for NONROAD Growth-Referenced External File (cont.)

Code	Description
030	Farm - Total
031	Farm - Diesel
032	Farm - Gasoline
033	Farm - LPG
034	Farm - CNG
040	Industrial - Total
041	Industrial - Diesel
042	Industrial - Gasoline
043	Industrial - LPG
044	Industrial - CNG
050	Lawn & Garden -Total
051	Lawn & Garden - Diesel
052	Lawn & Garden - Gasoline
053	Lawn & Garden - LPG
054	Lawn & Garden - CNG
060	Light Commercial - Total
061	Light Commercial - Diesel
062	Light Commercial - Gasoline
063	Light Commercial - LPG
064	Light Commercial - CNG
070	Logging - Total
071	Logging - Diesel
072	Logging - Gasoline
073	Logging - LPG
074	Logging - CNG
080	Railway - Total
081	Railway - Diesel
082	Railway - Gasoline
083	Railway - LPG
084	Railway - CNG

(cont.)

Figure A10-4
Indicator Codes Used for NONROAD Growth-Referenced External File (cont.)

Code	Description
090	Recreational - Total
091	Recreational - Diesel
092	Recreational - Gasoline
093	Recreational - LPG
094	Recreational - CNG
095	Recreational - 2sATV
096	Recreational - 4sATV
097	Recreational - Offroad MC
098	Recreational - Snowmobile
099	Rec Marine - PWC (backcast to ~zero in 1970; =092 for 1996 and after)
100	Oil Field - Total
101	Oil Field - Diesel
102	Oil Field - Gasoline
103	Oil Field - LPG
104	Oil Field - CNG

Figure A10-5
Predefined Horsepower Ranges for NONROAD

Minimum (must be greater than)	Maximum (must be less than or equal to)
0	1
1	3
3	6
6	11
11	16
16	25
25	40
40	50

(cont.)

Figure A10-5
Predefined Horsepower Ranges for NONROAD (cont.)

Minimum (must be greater than)	Maximum (must be less than or equal to)
50	75
75	100
100	175
175	300
300	600
600	750
750	1000
1000	1200
1200	2000
2000	3000 (9999 may be used to represent 3000 in files other than equipment population file)

Figure A10-6
Allowed Distinct Average Speed Inputs

File Extension	Description
FW1	LDVs on rural interstates may have their own average speed distribution.
FW4	LDVs on urban interstates may have their own average speed distribution.
FW5	LDVs on urban freeways and expressways may have their own average speed distribution.
FW2	LDTs on rural interstates may have their own average speed distribution.
FW7	LDTs on urban interstates may have their own average speed distribution.
FW8	LDTs on urban freeways and expressways may have their own average speed distribution.
FW3	HDFs may have their own average speed distribution on rural interstates.
FW6	HDFs may have their own average speed distribution on urban interstates.
FW9	HDFs may have their own average speed distribution on urban freeways and expressways.
AR1	LDVs and LDTs must have the same average speed distribution on rural principle arterials.
AR2	LDVs and LDTs must have the same average speed distribution on rural minor arterials.

(cont.)

Figure A10-6
Allowed Distinct Average Speed Inputs (cont.)

File Extension	Description
AR3	LDVs and LDTs must have the same average speed distribution on rural major collectors.
AR5	LDVs and LDTs must have the same average speed distribution on rural minor collectors and this must be the same as their average speed distribution on rural locals.
AR7	A single average speed distribution is applied to LDVs and LDTs on urban principal arterials, urban minor arterials, and urban collectors.
AR4	HDVs may have their own average speed distribution on rural principal arterials.
AR6	HDVs may have their own average speed distribution on rural minor arterials.
AR8	A single average speed distribution is applied to HDVs for rural major collectors, rural minor collectors, and rural locals.
AR9	A single average speed distribution is applied to HDVs for urban principal arterials, urban minor arterials, and urban collectors.

Figure A10-7
HPMS Road Type

Road Type	Description
11	Interstate: Rural
13	Other Principal Arterial: Rural
15	Minor Arterial: Rural
17	Major Collector: Rural
19	Minor Collector: Rural
21	Local: Rural
23	Interstate: Urban
25	Other Freeways and Expressways: Urban
27	Other Principal Arterial: Urban
29	Minor Arterial: Urban
31	Collector: Urban
33	Local: Urban

Figure A10-8
File Type for County NR File Table

File Type ID	Description
air	Air Transportation
cen	Census Population
com	Wholesale Establishment
con	Construction Employees
frm	Harvested Acres
gc	Golf Course Establishment
grw	National Defaults
hou	Family Housing
log	Logging Employees
lsc	Landscape Employees
mfg	Manufacturing Employees
min	Coal Mining Employees
oil	Oil and Gas Employees
pop	Population Files
rr	Railway Maintenance Equipment
rvp	RV Park Establishment
sbc	Snowblowers - Commercial
sbr	Snowblowers - Residential
sea	Seasonality
snm	Snowmobiles
wib	Recreational Marine Inboard
wob	Recreational Marine Outboard